

PUBLIC NOTICE

PERMIT APPLICATION: NRS 05.227

APPLICANT: Knox County Schools
Doug Whitted, Supervisor
P.O. Box 2188
Knoxville, Tenn. 37901
865-594-1825

LOCATION: Tributary to Beaver Creek, Proposed Gibbs Elementary School on Tazewell Pike, Knox County, 36.1279 °N, -83.8555 °W

WATERSHED DESCRIPTION: The project site is in the Lower Clinch River watershed (TN06010207) and characterized by agriculture and increasing residential development. The tributary is not currently assessed for use support, but Beaver Creek is assessed as not supporting its recreation and fish and aquatic life designated uses and impacted by siltation, alterations of stream-side cover, and pathogens. The classified uses for the tributary are fish and aquatic life, recreation, livestock watering and wildlife, and irrigation. The perennial stream runs approximately 2000 linear feet across the subject property with an intermittent tributary entering on the lower portion. The headwaters section on the property is surrounded with a wetland area. The existing stream has a base channel 2 to 5 feet wide and 3 to 5 feet deep. The substrate varies from bare soil to exposed bedrock and cobble outcrops. The riparian vegetation is dominated by black willow, green ash, blackberry and honeysuckle. (Photos of existing stream and wetland included on Internet version of this notice at <http://www.state.tn.us/environment/wpc/wpcppo/arap/>)

PROJECT DESCRIPTION: The purpose of the alterations is to facilitate the construction of a new elementary school and future middle school. The installation of an 80-foot road crossing over the stream headwaters will permanently impact 0.016 acres (689 sq. ft) of wetland. This wetland impact will be mitigated by the creation of 0.063 acres (2756 sq. ft., a 4:1 ratio). Approximately 1452 linear feet of the perennial stream would be relocated into a 1,453-foot channel. The relocation would originate south of the delineated wetland area. It would be constructed in the dry with an earthen berm plug at each end until the new channel is completed and stabilized. Any rock outcrops encountered during stream excavation will be left in place and available rock from the existing channel will be collected and placed in the new channel. Bare root saplings will be planted at a rate of 400 stems an acre in the available riparian zone and in two alternating rows on 15' centers on the side slopes. The proposed woody species for planting include *Quercus palustris*, *Fraxinus pennsylvanica*, *Platanus occidentalis*, *Quercus nigra*, *Cornus amomum*. Stream and wetland sites will be monitored bi-annually for three years, and vegetation will be guaranteed at a 75% survival rate.

In accordance with the Tennessee Antidegradation Statement (Rule 1200-4-3-.06), the division has determined that the proposed activity will not result in degradation to water quality.

PERMIT COORDINATOR: Juliana W. Kyzar

USGS TOPOGRAPHIC QUADRANGLE: Graveston 146 NE and John Sevier 146 SE



Photo 1: Wetland area at the headwater area of the stream.
Additional creation will be continuous with this area. Photo by JWK



Photo 2: Typical section in area proposed for relocation.



Photo 3: View of stream. This section is just downstream of the relocation.

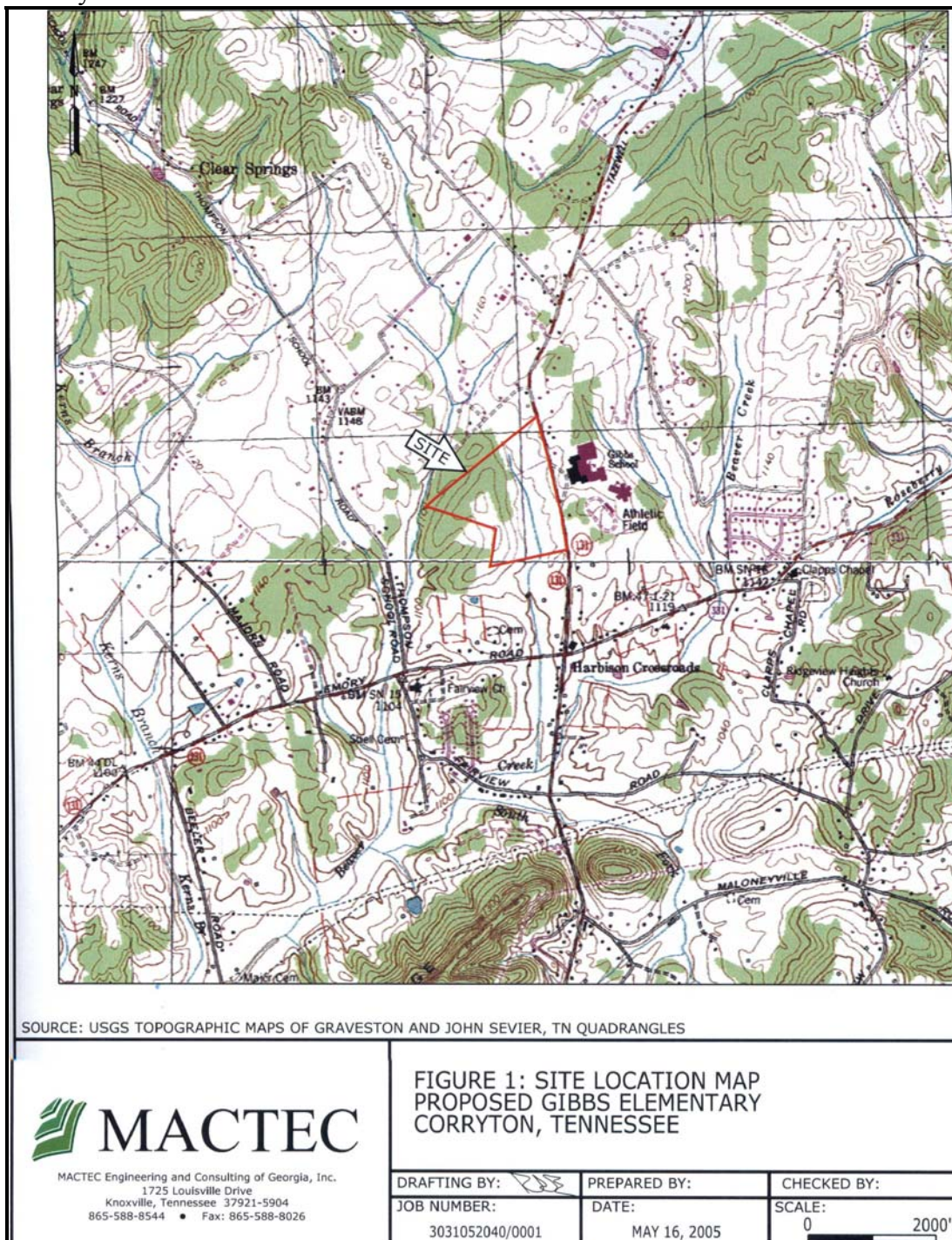


Figure 1:Topo map with project area indicated.

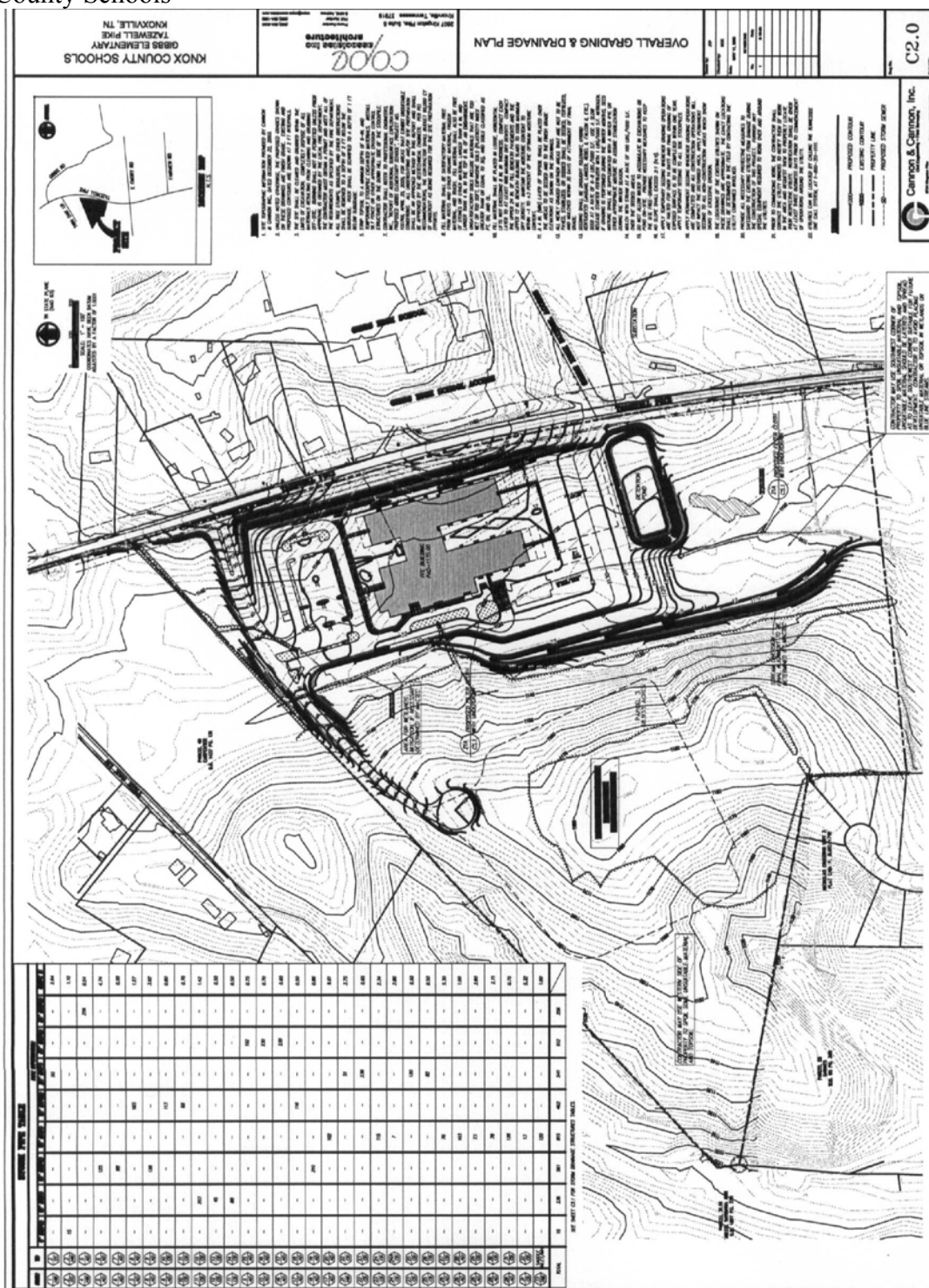
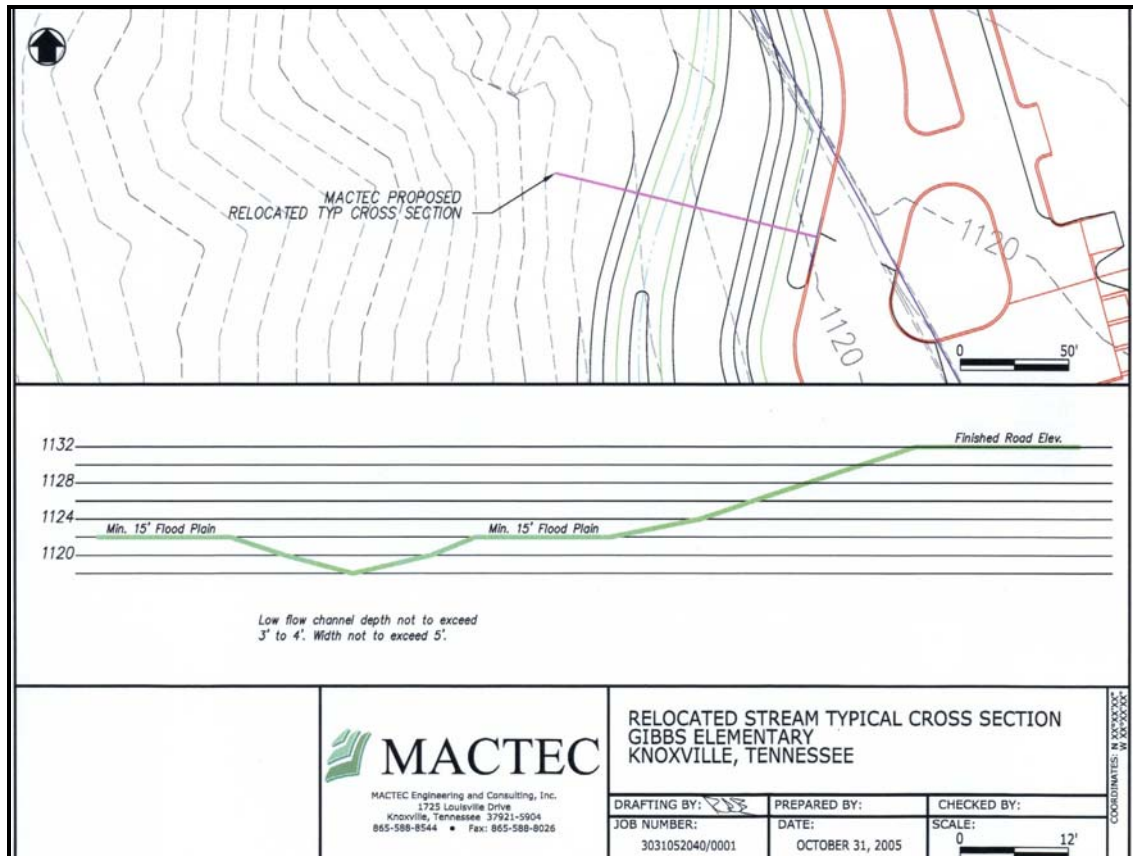
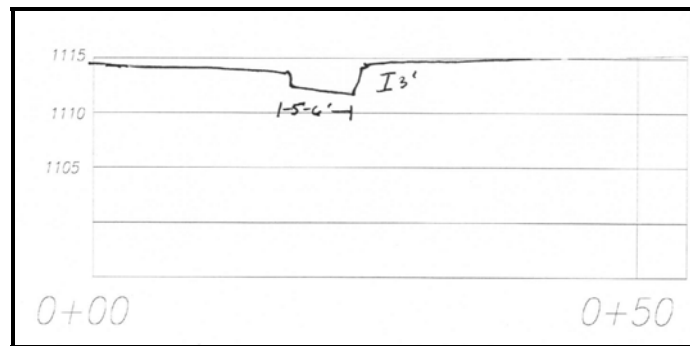


Figure 2: Overall site plan



Figure 3: Existing and proposed stream path. Dots indicated riparian zone.



Figures 4 a & b: Existing and proposed cross sections

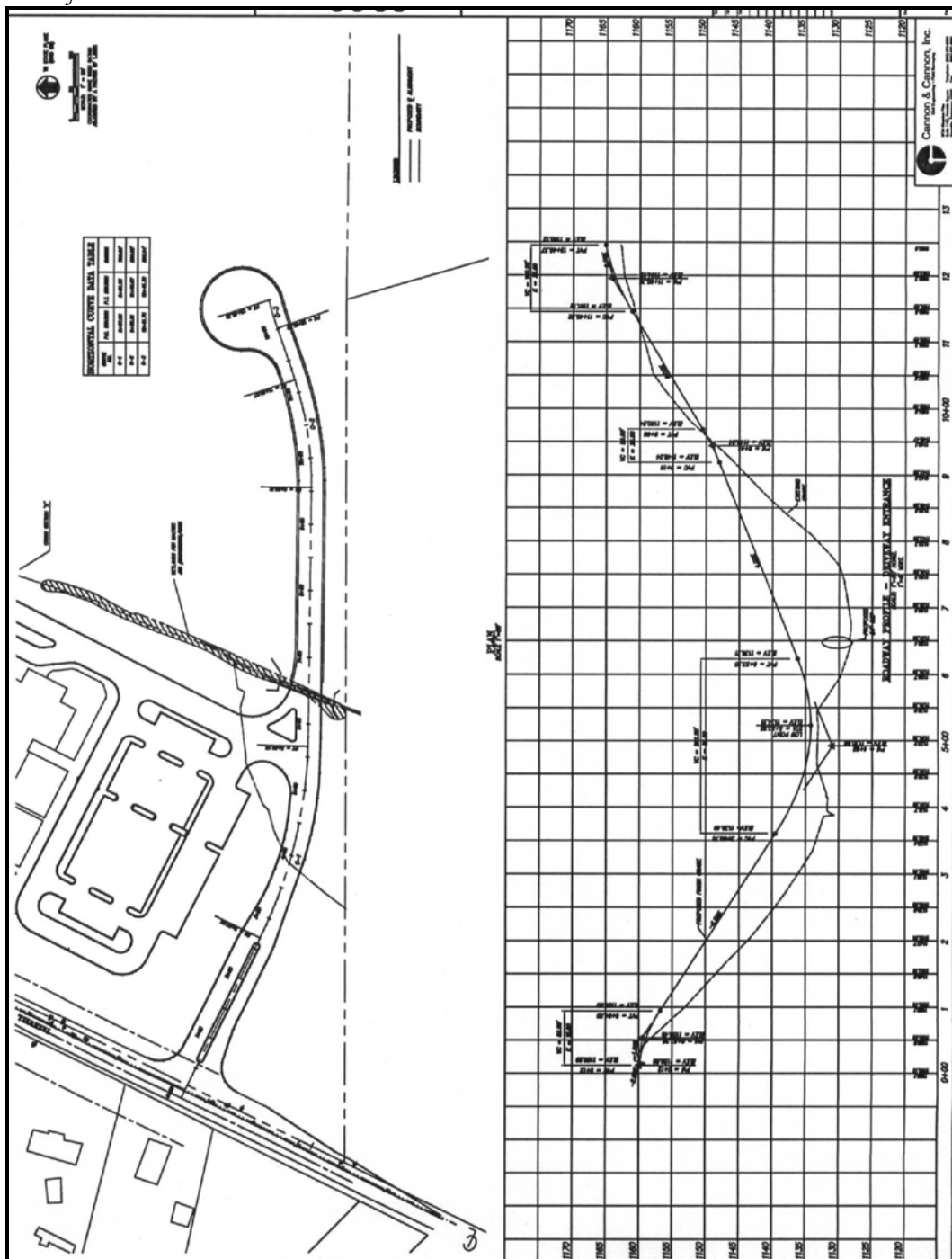


Figure 5: Driveway profile, will impact 689 sq. ft of wetland and 80 linear feet of stream.

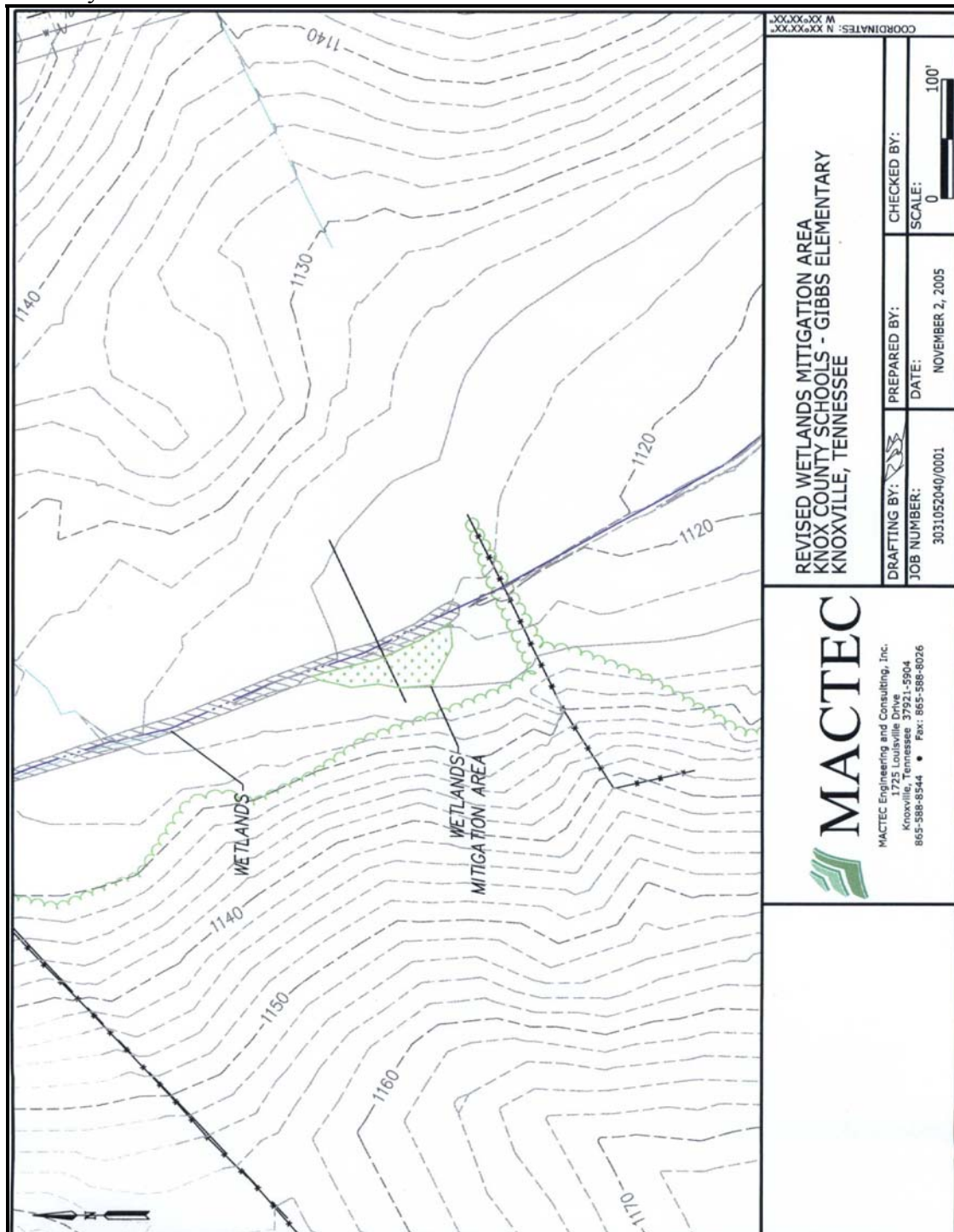


Figure 6: Proposed wetland mitigation area

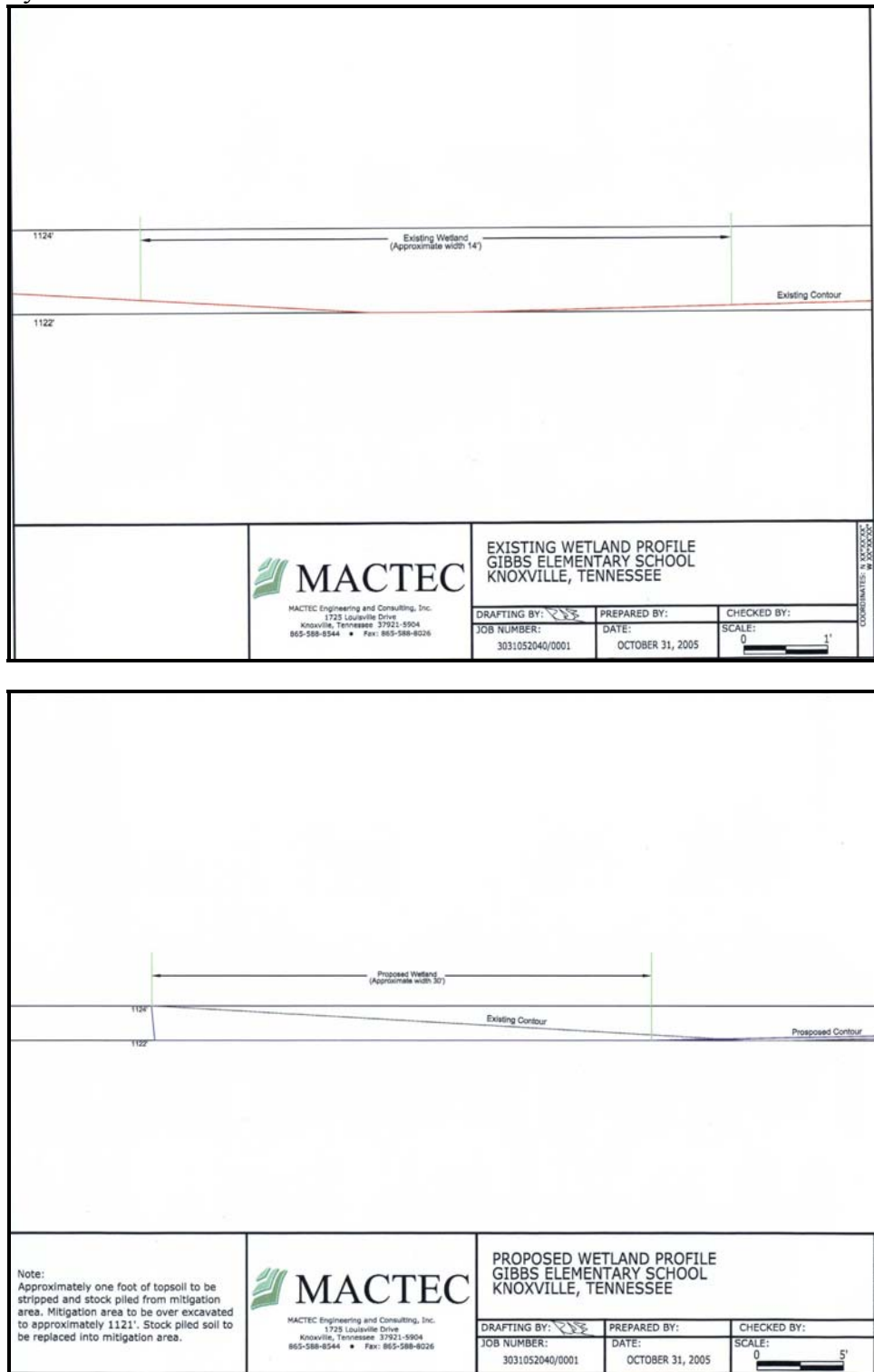


Figure 7 a&b: Wetland cross sections